

1998 EEE Nerospace Tonference



Snowmass at Aspen, Colorado March 21

FINAL CALL FOR PAPERS



ANNOUNCING THE 4TH IEEE... JUNIOR ENGINEERING & SCIENCE CONFERENCE

. . . to be held in conjunction with our 1998 Conference in Snowmass, Colorado Mar 21- Mar 28, 1998

WHO IS ELIGIBLE TO PARTICIPATE:

Any child, - kindergarten through high school, attending the conference as an official guest of a registrant may present a paper as a Junior Engineering & Science Speaker.

Topics

Topics with direct or tangential relationship to science, engineering, or mathematics are encouraged.

Papers should fall in TO one or more of the following 3 CATEGORIES:

- 1. An original idea accompanied by supportive reasoning and
- 2. An experiment, invention or 'Yield work",
- A review summarizing a topic of interest to the Junior Speaker.

PROCEDURE:

- Call or write the junior conference chair, Barry Madore, to let him know of your child's interest. Please include both your work and home phone numbers as well as your address.
- 2. Speakers at the Junior Conference are requested to prepare 8 1/2 x 11 inch viewgraphs (transparencies, for

projection with an overhead projector) to use in their presentation. Help from an adult is definitely allowed and encouraged. A viewgraph projector, a pointer and a screen will be available for their use at the conference. There will be opportunity for them to practice with the overhead projector prior to their presentation if they wish.

- 3. The presentations can be of any length from 2 to 20 viewgraphs and from a few minutes to 20 minutes.
- 4. Mail two clean paper copies of the viewgraphs to the Chair of the junior conference by January 9, 1998. The committee will duplicate them and prepare a Proceedings to be distributed at the conference to all the participating children.
- The first Viewgraph should consist of a short biography, including the child's age, education background, year in school, hobbies, intellectual and sporting interests, gender, and any other pertinent information (and maybe a photo).
- Include a registration fee of \$25, payable to the IEEE Aerospace Conference. Mail checks to Barry Madore at the address below.

The Junior Engineering & Science Conference is being planned for Tues, March 24 in the Top Of The Village meeting room just above their Jacuzzi & swimming pool. The date and/or place could change if a program conflict develops — we will inform you later. If you have any questions or suggestions, please contact:

Junior Engineering & Science Conference Chair:

Barry Madore Caltech, IPAC 100-22 Pasadena, CA 91125

Work: Work Fax: E-mail:

818-397-9512 818-397-9600 barry@ipac.caltech.edu



The Conference

The internationally attended IEEE Aerospace Conference is organized to promote interdisciplinary understanding of aerospace systems, their underlying science and technology, and their applications to government and commercial endeavors. The annual week long meeting is sponsored by the IEEE Aerospace and Electronics Systems Society (AESS).

WHAT SETS THIS CONFERENCE APART

The high quality of papers and presentations. Typically 157.--3570 of presentations are by IEEE Distinguished Lecturers, probably the highest of any conference. Daily plenary sessions feature renowned scientists/engineers and/or high ranking members of the government or military.

Exceptional access to authors and invited speakers. Almost all speakers attend the entire week and are available throughout the sessions, breaks, lunches, nightly Conference dinners, shared living arrangements and the social and recreational activities that complement the technical program. These provide extraordinary opportunities for follow-on discussions and collaborative dialogue with aerospace pacesetters.

These ongoing exchanges frequently extend years beyond the week-long conference, benefiting the participants, their organizational sponsors, the industry, and the engineering and scientific professions.

Multidisciplinary focus. This is the one general conference that facilitates cross fertilization of aerospace disciplines and dialogue among members of government, industry and the academic community.

Professional Development of Authors. Through its unusually thorough and supportive review process, the conference provides expert guidance from senior engineers and scientists as well as language reviewers and the opportunity for instructive interaction between author and reviewers. First-time authors are nurtured.

Journal-Quality Proceedings. Papers receive the more thorough technical review and provide the significantly greater technical depth characteristic of journal articles rather than conference papers. The 4-volume '97 Proceedings totaled 2,244 pages, with papers averaging over 15 pages each. Proceedings are distributed during Conference registration.

Science and Aerospace Frontiers. This very popular daily plenary session features internationally prominent researchers working on the frontiers of science and engineering topics which could have significant portents on aerospace and the World we live in. Registrants are briefed on cutting edge technologies emerging and intersecting with their disciplines.

A VIA TION WEEK & SPACE TECHNOLOGY ON THE IEEE AEROSPACE CONFERENCE:

Tebruary '96 Conference: 4'... the well-structured event is Decoming one of the nation's most prominent and influential Berospace professional venues." (Feb. 26, 1996 issue, pg. 60)

February "97 Conference: "Now in its 18th year, the IEEE Event has established itself as one of the premier policy and ethnical forums for civil, commercial and military aerospace SSUBS. The 1997 conference attracted approximately 300 International attendees and 137 technical and plenary resentations - triple the number of 1995 PaPers " (March 10, 9 9 7 ISSUE, pg 57)

TECHNICAL PROGRAM

This Call invites papers reporting original work or state-of-theart reviews that will enhance knowledge of:

- 1) Aerospace systems, science and technology
- 2) Applications of aerospace systems or technology to military, civil or commercial endeavors
- System engineering and management science in the aerospace industry
- Government policy that directs or drives aerospace programs, systems, and technologies.

All conference sessions will be held In Snowmass Village at the Conference Center and the Wildwood Hotel.

ABSTRACT & PAPER

A 500 word abstract (4 copies) containing your name, address, phone number, and E-Mail address must be received by the Program Chair, Ed Bryan, by August 15, 1997. Please mail the four copies to:

Ed Bryan, Program Chair IEEE Aerospace Conferences Office 2408 Palm Avenue, Manhattan Beach, CA 90266.

Please, do not e-mail or fax your abstract.

Accept/reject notices and author instructions will be sent within two weeks. Three copies of a complete paper, 8 - 20 pages or Ng er if justified, must be received by the Program Chair by Fri dy, October 10, 1997.

FOR MORE INFORMATION

VISIT OUR WEB SITE: www.aeroconf.org for updates, instructions, and the latest information

TECHNICAL QUESTIONS:

PROGRAM CHAIR
Ed Bryan

581 Paseo Miramar

Pacific Palisades, CA 90272

e-mail:

edbryan @alumni.caltech.edu

Phone:

310-454-9461

Fax:

310-454-6617

GENERAL ISSUES:

REGISTRATION CO-CHAIRS

Mike Johnson Beth Leitereg

2225 Roscomare Road,

Los Angeles, CA 90077'-2222.

e-mall·

johnson@ee.ucla.edu

Phone:

310-472-8019

SOCIAL COMMITTEE

PLANS AND DINING

The Social Committee is arranging a Saturday evening gelacquainted pizza dinner party and reception, full catered dinners in the main conference room during breaks in four of the evening meetings, two hot catered picnic mountain lunches, and a poster dinner party. The costs for these activities and meals are included in the registration and guest activities fees.

Also, a banquet (at additional charge) and an expanded activity program for guests are in the planning stages.

REGISTRATION

REGISTRATION FEES Incl Activities & Meals Pkg	Received By Nov 14, '97	Received After Nov 14, '97	Received After Mar 13, '98
IEEE Members	\$485	\$585	\$685
Non Members	\$535	\$635	\$735
Guests (Activities & Meals)	\$125	\$150	\$175

Travel AND LODGING

Travel has been negotiated between Los Angeles and Snowmass round trip for \$450, including ground Flights from other major cities are in transportation. negotiation — details will be available later.

Lodging at special rates has been obtained for a limited number of rooms in hotels, inns, and 2, 3, and 4-bedroom condominiums in Snowmass Village near the Conference Priority will be given to authors and their guests whose papers are completed and accepted the earliest, and whose registration and lodging payments are sent in the

Lodging rates per person for 7 nights lodging , 2 persons/bedroom

•Hotel Wildwood				
(Official	Conference Hotel)	\$898		
 Stonebridge Inr 	1	\$800		
• 2 BR/2 Bath Top	o of the Village	\$888		
. 3 BR/3 Bath Top		\$869		
• 4 BR/3 Bath Top		\$690		
• 2 BR/2 Bath Wo	odbridge Condos	\$640		
Laurelwood Stu	idios	\$874		

Registration, Travel, & Lodging Forms will be mailed in October '97

IEEE Aerospace Conferences Board of Directors

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Program

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Shadan Ardalan Steve Fiedler

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Walt Gregorwich

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Fleur Yano

CD-ROM PROCEEDINGS Rob Wright (Chair)

Keith Pasketf

David Williamson

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CONFERENCE ADVISORS

Robert A. Profet

Yahya Rahmat-Samii

David F. Woerner

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Annette Carver

IEEE 1998 AEROSPACE CONFERENCE

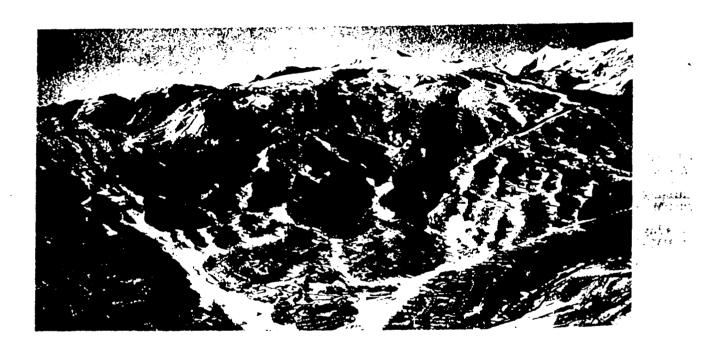
Snowmass Village, Colorado March 21-28, 1998

Social and Recreational Program

All of the lodging listed in the Call for Papers is close to the slopes, and some of themare actual skl-in ski-outfacilities in the registration package (and soon on our web site at www.aeroconf.erg) you will receive, there will be a map showing the locations of the hotels, inns, lodges and condos mour list, and their proximity to the slopes. Many accommodations have spectacular views, a swimming pool, hot tub. sauna. fitness room, and daily maid service. There are hotel-type accommodations as well as deluxe 2, 3, and 4 bedroom condos with complete kitchens, balconies, fireplaces, washers, and dryers.

Free shuttle service is available within Snowmass Village.

Activities in Snowmass and Aspeninclude downhill skiing, cross-country skiing, ice skating, snowshoeing, snowmobileing, snowcat touring, sleigh riding, twilight dinner touring, mountain ballooning, and tennis. Snowmass has excellent restaurants and is short shuttle ride from Aspen, with its outstanding restaurants, art galleries, museums, and historic mining attractions.



Registrants Receive With Their Registration Fee:

- Admission to all sessions,
- Social package: Eight meals, receptions & parties,
- Proceedings: Last year's 4 volumes contained 2,244 pages, This year's will be even more valued.
- Reduced rate Recreation Package for skiers (see below) and for non-skiers (in the planning stages).

Guests of Registrants Receive With Their Guest Fee:

- · Admission to a few sessions of their choice,
- $\bullet\,\mbox{The}$ same social package as registrants,
- An additional social program for guests only (in planning stage).
- Reduced rate Recreation Package for skiers (see below) and for non-skiers (in the planning stages).

Recreation Package for Skiers:

• For those interested in skiing, the committee is arranging for the purchase of 5-day all-mountain lift tickets for \$225 (instead of the expected window price of \$260) by registrants and guests. They are valid at Snowmass, Highlands, Aspen, and Buttermilk Mountains interested – beginners to experts.

NOTE: All activities at IEEE Aerospace Conferences, inducting meals and social/recreation times, are intended to promote, enhance, and facilitate technical discussions and long-term professional and personnal relationships

SOCIAL COMMITTEE PLANS

The Social Committee is arranging a Saturday evening getacquainted pizza dinner party, catered full dinners in the onference rooms during breaks in four or five of the evening casions, and an 8-restaurant catered poster party Friday night.

'or skiers. there are plans for both downhill and cross country group skiing, and mid-mountain catered hot ski picnics Monday ind Thursday (which may also be available to non-skiers).

'or non-skiers, the social committee will be assisting with :lternative activities such as snowmobileing, snowcat touring, sleigh riding, mountain ballooning, twilight dinner touting, Aspen sightseeing, or ice skating.

Children are welcome guests at these social and dining events, and are encouraged to participate in the Junior Engineering & Science Conference on Tuesday.

Skiers, both registrants and guests, may purchase a recreation package which includes a 4-mountain, 5 day ski lift ticket for 8 cost of \$225 compared to the estimated \$260 price to the public. (This year our group discount is much less because it is high season.)

SOCIAL PACKAGE — MEALS, RECEPTIONS & PARTIES FOR REGISTRANTS AND THEIR GUESTS — AU COSTS ARE INCLUDED IN THE REGISTRATION AND GUEST FEES

Saturday Night March 21

Location - To Be Selected

3:30 PM - Registration and Icebreaker pizza dinner party at a location to be selected Replete with revelry, repartee, and other risibilities, and LOADS of great food! Pizza plus Chineee? Mexican?. TSD

Sunday Evening March 22

Conference Center

Anderson Room

5:45 PM - Conference Dinner

On The Slopes

Spider Sabich Picnic Palace

Monday Afternoon March 23 1:00 PM - Catered Mid-Mountain Picnic A great piping hot lunch cooked for us right on the slopes.

Monday Evening March 23 6:45 PM - Conference Dinner **Conference** Center

Anderson Room

Tuesday Evening March 24- Conference Committee is still deciding - This will be announced later.

Wednesday Evening March 25 6:45 PM - Conference Dinner

Conference Center

Anderson Room

Thursday Afternoon March 26.

On The -Slopes

Spider Sabich Picnic Palace

1:00 PM - Catered Mid-Mountain Picnic A great piping hot lunch eo&l-for" -- right cm the slope. Proceeded by NASTAR races for all . - --

Thursday Evening March 26 6:30 PM - Conference Dinner. Conference Center

Anderson Room

Friday Evening March 27

The Timbermill

6:00 PM -Concluding Celebration - The Second Traditional Annual Poster Party and Feast! An 8-Restaurant Catered Feast! Throughout the week we've shared brilliant engineering insights in the technical program and innovative Alpine techniques in the recreation program. On this final night, we rend and discuss the posted papera with the authors, and continue in the techno-socio environment of the final feasting program where we can also converse with various authors from the week-long program, and you have the opportunity to ask those questions that have been nagging you all weak or expose your latent theory.

PRELIMINARY 1998 CONFERENCE SCHEDI LE

	MATERIA MARKET	Mon Mar 23	Tues Mar 24	wed Mar 25	Thur Mar 26	Fri Mar 27	WING S
A.M.		Catered Mid-Mtn Picnic			Catered Mid-Mtn Picnic 1 P.M.		
P.M.	Restration Cebreaker Pizza Dinner Party J PM-???	Mon Session 4:30-10 P.M. (Includes Dinner)	Panel 5:00-6:30 Banquet 6:30-8:00 Jr. Eng & Science Conference 8:00-9:30	Wed Session 4:30-10 P.M. (Includes Dinner)	Thur Session 4:30-10 P.M. (Includes Dinner)	Fri Session 5:30 -12:00 P.M. Poster Party & 8-Restaurant Feast	

PRELIMINARY TRACKS, SESSIONS, & ORGANIZERS

1.0 Plenary Sessions/Science & Aerospace Frontiers

TRACK ORGANIZER 310545-9670

ROBERT PROFET

President A. CEO Trans. Spectrum Corporation — I.E.E. E. Aerospace Conferences Program Chair 1994. Conference Chair 1995, 1.996. Board of Directors. Chair, 1994 Present

2.0 Global Virtual Presence

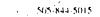
TRAC	K ORGANIZER 505-\$46.6243	CHRISTINE ANDERSON anderson@plk.af.mil	Director, Space Technology, USAF Phillips Laboratory, AIAA Fellow, Member, AIAA Board of Directors
TRAC	CK COORDINATOR 50 S-846.5785	GENE BEDNARZ bednarz@plk.af.mil	Senior Scientist, Space Technology Directorate, USAF Phillips Laboratory, Kirtland AFB, NM
2.1	Hyperspectral Remote Sensing for GV 508-846.798?	/P JOHN O'HAIR ohair@plk.af.mil	Program Manager for Spectral Sensing Support, Lasers & Imaging Directorate, USAF Phillips Laboratory.
2.2	SpaceLaser Technology.! 505. s46-4020	LINDA DEHAINAUT dehainal@plk.af.mil	Optical Engineer, Laser Systems Div., Laser & Imaging Directorate, USAF Phillips Laboratory.
2.3	Lightweight Structures And Optical S 505-846-82\$0	ystems ALOK DAS dasa@plkaf.mil	Technical Director, Space Vehicle Technology Division, Space Tech Directorate USAF Phillips Laboratory.
24	High Accuracy Pointing, Control, Track Technologies 50s-846-607	sing ● nd Stabilization JESSE LEITNER leitnerj@plk af.mil	Project Leader for Autonomous Guidance. Navigation& Control, Space Systems Tech Division, Space Technology Directorate, USAF Phillips Laboratory
2.5	Knowlege On Demand And DataFusio 505-846-0484	n BABU SINGARAJU singaraju∉plk af.mil	Chief, Space Mission Technologies Division, Space Technology Directorate, USAF Phillips Laboratory, Kirtland AFB, NM.
26	Payload Support Technologies 505-846-2767	CAPTAIN TIM MURPHY murphyt@plk af.mil	Dcputy Chief, Space Vehicle Technologies Division, Space Technology Dim[orate, USAF Phillips Laboratory.
27	Protection Technologies 505446-0961	MARK HOPKINS hopkins@kafb.aero.org	Senior Project Eng., The Aerospace Corp., Advanced Weapons & Survivability Directorate, USAF Phillips Laboratory, Kirtland AFB, N M " "

3.0 21st Century Space Mission Management & Design

	•••	zist century sp	ace magning management & zengn
ΓRA	CK ORGANIZER 818-354.7023	KANE CASANI e.kane.casani€jpl.nasa gov	Manager of NASA's New Millennium Program, JPL NMP is ● n advanced-technology validation flights program enabling NASA'S 21st century science mission.
J	Autonomous Systems For 21st (818-354-2597	Century Space Missions DOUG BERNARD Douglas.e.Bernard@jpl.,nasa gov	Supervisor, Flight System Engineering Group, JPL. Leads the team developing the "Remote Agent." Autonomy technology for the New Millennium program's Deep Space 1 Mission,
.2	Space Mission Technologies and Century 818-3 \$47024	Management In The 21st BOB METZGER robert.m.metzger@jpl.nasagov	Business operations manager. New Millennium Program, JPL Implementing new innovative business practices for the advanced technology validation program.
3	21st Century Space Missions 818-354.7024	BOB METZGER robert.m.metzger@jpl.nasagov	(same as above)
4	Space Mission Design Processes 818-306-6147	In The 21St Century JOHN PETERSON john.c.peterson@jpl.nasagov	Manager, Integrated Designs Systems, Jet Propulsion Lab. 7 patents, more than 30 publications & awarded NASA's Exceptional Achievement Medal.
		4.0 Flight	t Systems Technologies
	Spacecraft Attitude Determination	n nd Control	

	4.0 Fligh	t Systems Technologies
Spacecraft Attitude Determination ●		Colories Hunter Cores & Communication v. A. U.C. Potential shafield of account another surround
310-416-5219	A. DORIAN CHALLONER adchalloner@ccgate.hac.com	Scientist, Hughes Space & Communications with U.S. Patents in the field of spacecraft control systems, dynamics & modeling.
310-616-4858	ANDY WU yawu@ccgate.hac.com	Principal Scientist, Mechanism, Cryogenics & Controls laboratory, Hughes AircraftInterests in precision pointing & tracking, micro-processor based digital daplive control. large space structures
Space Power Systems 505-846-1454	DEAN MARVIN marvind@kafb aero org	Space Power Systems/Senior Project Engineer, SpaceTechnologyDirectorate, The Aerospace Corp
Smart Structures Dynamics & Contr 408.656-2936	ol JANET STUART jgstuart@aa.nps.navy.mil	National Research Council Research Associate, Naval Postgraduate School
Computer-Aided Engineering Of Futi 937-2554831, X3486	ure Avionics Systems GREG CREECH creech@elwpafb.af.mil	Computer-Aided Engineering Future Avionics Systems Research Engineer, RF Components & Technology Branch, Avionics Directorate, USAF Wright Laboratory.
Military Avionics 505-84 S.587S	JOHN M BORKY jborky&bdni.com	Received Digital Avionics Award for 1992 Vice President of Technology & Logistics, BDM Federal, Inc
973.255.3627	PAUL MCMANAMON memanapi@aa wpafb.ai mil	Acting Chief Scientist Avionics, Air Force Research Scientist Interested in Sensor Technology for Aerospace Applications Chairman • etting IRIS & chairman of the July 1996 London NATO /IRIS Conference
Manufacturing and Assembly of High Boards 310-814-1898	Density Interconnect BILL BJORNDAHL bill bjorndahl@trw.com	Senior Technologist, advanced manufacturing. Electronic Systems & Technology Division, TRW'. Interest In advanced technology for manufacture of complex high density electronic • momblimb
Electronic Puckaging for Aerospace / 206-657-3171	Applications JAMES LUCAS James plucas & boeing com	Electronic Packaging Engineer, Advanced Packaging & Analysis, Boeing Defense & Space Group

, TW	Microwave & Integrated Circuits 310-812-2262	CHRIS GROSSMAN chris grossman@trw.com	V Integrated Circuits
47.0	MEMS 818-364-7215	ASAD MADNI berlmadni@aol.com	· · · · · · · · · · · · · · · · · · ·
		5.0 A	ir/Space Flight Systems
5.1	Aircraft Flight Testing 805-277.2555	T. GLENN COLEMAN tgcoleman@aol.com	
	301-757-4452	JENNIFER O'CONNOR orjm%am4@mr.nawcadnavy.mil	• · · · · · · · · · · · · · · · · · · ·
5.2	Aerospace Test & Evaluation	ROBERT 'F AYLOR taylorr%cww@mhs elan af.mil	Principal Engineer, Project Planner& Technical Staff, Electronic Warfare & Test Evaluation, Benefield
5 3	Satellite Systems for Wireless Con 303.442-5330	nmunications ROBERTE MUNSON FAX 303-442-3401	IEEE Distinguished Lecturer Consultant on Innovation Low profile & Efficient Antennas, Holds 30 Patents on Microstrip Antennas. Including the First Patent
5A	Commercial Satellite Systems Des 415-424.2702	ign BILL STRAKA bstraka@svl ems.lmco com	Senior Staff Scientist, Lockheed Palo Alto Research Lab, Lockheed Martin Missiles & Space Interestin satillitesystems, astro-dynamics, sensor systems
5.5	System Design Optimization 818.306-61S7	ALEX FUKUNAGA alex.fukunaga@jpl.nasagov	Senior Member. Information Systems & Computer Science Staff, JPL Interest in optimization, artificial intelligence, evolutionary computation
5.6	Autonomous Systems 818-354-2744	GUY K. MAN guy.k.man@jpl.nasa gov	Chair, NASA New Millennium Integrated Product Development Teams, JPL
5.7	Advanced Launch Vehicles I 714.8%-5855	WILLIAM A. GAUBATZ gaubatz@apt.mdc.com	Director, Business Dept for Advance Space Systems, McDonnell Douglas Aerospace Responsible for identifying & understanding the needs of military, civil & commercial customers & developing advanced concept & programs to satisfy those needs.
5.8	Advanced Launch Vehicles II 805-572-5745	STEVE FRANKLIN sfrankliQladc.lockheed.com	Avionics Systems Engineering, Allied Signal Interests in inertial navigation systems, redundancy, management, fault protection
S.9	GPS Applications & Technology 310-336-8733	PHILIP DAFESH da fesh@courier4.aero.org	Engineering Specialism, Communication Systems, Aerospace Corp., Physics Faculty Member &t CSUDH. Member IEEE, APS.Sigma PI Sigma& Tau Beta Pi.
5.10	Small Satellites & Enabling Technol 310-206-4801	ologies J. MICHAEL JOHNSON johnson@cc.uclaedu	Electrical Engineering Consultant, President of North Shores Associates, U.S. Patent Agent
		6.0	Antennas & Radar
6.1	Antennas	WALTER S. GREGORWICH	Senior Engineer, Advanced Systems at Lockheed Martin Research & Development Laboratory, USAF
6.2	415424-2633 Antennas For Wireless Comm 303-541-6911	PATRICK PERINI pperini@uswest.com	Colonel (Retired). U.S. West Advanced Technologies in the Wireless Technology & Eng Group. Interests include antenna development for wirless comm., smart antenna systems. & propagation analysis.
63	Space-Based Radar; Multi Sensor R 505-8%.4412, X427	• •	Chief of Space-Based Surveillance & Satellite Communications Branch, Space & Missik Technology Directorate, USAF Philips Lab
6.4	Bistatic Radar Applications 315-330-2278	BILL WOLF wolfw@rl.af.mil	Deputy Chief, Surveillance Division. Systems and Photonics Dimetor-ate, Rome Laboratories. Interest in advanced servo concepts, bistatics, signal processing, fusion.
6.5	Reflector Antennas 213-740-4704	ALUIZIO PRATA prata@hertzusc.edu	Associate professor of Electrical Engines-ing-Electrophysics, USC
6.6	SBR Antennas and Processing System Detect ion	ns for Moving Target HAL MALLIOT	Senior Systems Engineer, Lockheed Martin Missiles and Space Co., Interest in airborne and satellite borne
6.7	mailio Large Aperture Imaging Systems	t@rddvax.decnet lockheed.com	radsr and RF remote sensing systems Staff Engineer. Nichols Research Interest in dynamics and control of precision optical structures
	505-846-9944	robertsl@plk af.mil	Q
		7.0 Remote	Sensing/Opto-Electronics
7.1	Target Tracking Applications 860-486-4823	YAAKOV BAR-SHALOM ybs@ee.uconn.edu	IEEE Distinguished Lecturer. IEEE Fellow. Professor of E E. Univ. of Corm Organizer of National Short Courses on Target Tracking, Author of 5 books and over 200 papas
7.2	Remote Sensing I 609-921-3892, X258	BILL MILLER bmiller@scitec.com	Senior Scientist and Vice President, Scitec Incsubsidary of TRW. Interest in remote sensing, IR Phenomenology, combustion
7 .3	Remote Sensing II 310-336-1047	DAVID LAWRIE lawrie@courier4.aero.org	Manager. Sensing & Simulation Section. Sensing & Exploitation Dept., The Aerospace Corp. Interests in eketro-optical instrumentation and data analysis, electro-optical sensor modeling on d simulation, constellation.kvel simulations of space surveillance systems
7 .A	Advanced Sensors 562-942-5247		Advanced Project Manager, Northrop Grumman Cm-p Specialistin rapid prototyping of advanced sensor or command and control applications and displays
· . 5	Advanced IR Sensors 310-336-8836	Iomheim@courier4.aero.org	Distinguished Engineer. The Acrospace Corp. Sensor Systems Sub-Division. Interestin space-based visible &infrared electro-optical designand development, advanced visible and infrared focal plane technology, hyperspectral sensors, color imaging
.6	Opto-Electronics I 702-588-4176		IEEE Distinguished Lecturer, Founder, President & CEO Opticomp Corporation (developing technology, for optical interconnects); has 7 patents & more than 70 publications
	505-844.5015	RICHARD CARSON	Manager of Product Development, Vertical Cavity Surface Emitting Laser (VCSEL), MicroOptical Devices Inc. Formerly: Senior Member of Technical Staff Sandi a National Labratories
	Opto-Electronics II 702-588-4176	PETER GUILFOYLE connect@opticomp.com	(Same as 76 Bio)
i			



8.0 Software and Systems Engineering

	Oio Doitival	e una systems Engineering
K.I	Real-Time Fault-Tolerant Computing Systems 313-763-0391 KANG G SHIN kgshin@eecs.umich.edu	
82	Software Engineering 970-491-7016 ANNELIESE VON MAYRHAUSER avm@cscolostate.edu	
8.3	Computations for Complex Systems RANDY L HAUPT 7.19.333.3190 RANDY L HAUPT	
8.4	Systems Engineering for Software-Intensive Systems 703.294.6974 TONI SHETLER toni.shelter@TRW COM	Project Manager. Modeling Simulations & Network, TRW-SIG
8.5	Securing Messages ● nd Information HOYT KESTERSON 602-862 -S272 H. Kesterson @ Bull Com	
8.6	Computational Intelligence JACEK M ZURADA 502-852-6314 jmzura02@starbase.spdlouisville.edu	IEEE Distinguished Lecturer, 1993 Presidential Award For Research, Scholarship, and Creative Activity. Assoc Ed of IEEE Transactions On Neural Networks & The Artificial Neural Networks Journal, Professor of Electrical Engineering, University of Louisville
8.7	Scalable Systems DAN RIDGE 301-286.3062 newt@ccsdis.gsfc.nasa.gov	Staff Scientist, Center of Excellence in Space Data& Information Science (CESDIS), NASA Goddard
8.8	Standardization In Systems Engineering ond Design 31 O-8 13-8141 SONYA SEPAHBAN sonya.sepahban@trw.com	Manager. System Design Integration Center & TRW. previously managed GN&C, Aeroscience & Flight Mechanics & NASA Johnson Space Center.
	9.0	Communications
9.1	DOD & Cmmrcl Broadband Communications Technologies & Applications 703-808-492? LT. CMDR. WILLIAM BARRINGTON atkron65@aol.com	Project Officer, Antenna Systems for Space Applications, US Navy. Interest in broadband phased arrays, wideband communications. photonics for array control.
	303-666-0662 JAMES STUART	International Consultant, formerly V.P. @ Teledesic; Chief Scientist @ Ball Aerospace, foursding Chief Eng of OSC. Awarded NASA's Exceptional Service Medal @ JPL, holds 8 patents.
92	Satellite-Based Communications NORBERT KLEINER p21829@email.mot com	Manager of Propulsion Engineering, Motorola, Satcomm.Interest Tit space communications & system design.
93	Protocols, Network Management, & security 315-330-1887 PRISCILLA CASSIDY cassidyp@rl.af.mil	Computer Engineer in Networks Branch of C3 Directorate.Interest includes ATM in tactical environment and protocol simulation,
9A	Data Communication 205-890-655 I NADEEM F. AUDEH audeh@ebs330.eb.uah.edu	Professor of Electrical & Computing Engineering. University of Alabama Served as Department Chair & Graduate School Dean.
9.5	Data Communications Networking; Wireless Comm 408-991-7383 AL CHAME al_chame@email.sps.mot.com	Senior Applications Engineer, Motorola. Interest in telecommunications, data communications, networks
4.6	Advanced Internet Technologies CHARLES FOGG mcf@switchingpost.com	Founded NetVantage, served as Preident & Chair. Founded & served as Chair, president, & CEO of several startup companies
	10.0 Poli	cies, Plans & Partnerships
10.1	Government Policies & Plans I STEVE SLOBODA Por Sloboda@earthlink.net (resident, Space Vectors Independent consultant cm apace education. policy& strategy. Retired USAF Colonel, Career space operations officer.
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11.0 **Aerospace Missions**

1.1	Implementing Missions Faster, Better,	Cheaper	
	410-516.7337	H WARREN MOOS	Professor of Physics & Astronomy Johns Hopkins University Principal Investigator for the Far Ultraviolet
		hwm@eta.nh:cihu.edu	Spectroscopic Explorer (EUSE) Interesting appropriately space astronomy

1.2 Implementing Missions Faster, Better, Cheaper

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